Windows® Document Signing with PrivaSeal™

James S. Prohaska
David R. Auman
Aliroo, Inc.

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Enterprise Security and Document Content Assurance

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Corporate Mission

Provide comprehensive, easy-to-use
solutions
for every dimension
of enterprise document security
and content assurance

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Issues with Digital Signatures

- **Have to be Easy to Use and Apply**
  - **A signed document must be recognized by everyday users.**
  - **Average User must be able to easily sign and verify.**
  - **Complementary to EXISTING Work Processes.**
    - **Multiple Signatures**
    - **Digital Certificate Verification**
    - **Integral to working documents**

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Issues with Digital Signatures

- **Implementation Cost**
  - Cost of Implementing a PKI
    - Full Internal PKI
    - Commercial based PKI
  - Cost of issuing Tokens
  - Cost of Certificates
  - Administrative Cost

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Issues with Digital Signatures

Need a flexible product that minimizes the barriers to:

$\Rightarrow$ Ease of Use $\Leftarrow$

$\Rightarrow$ Cost and Level of PKI Implementation $\Leftarrow$

$\Rightarrow$ Cost of Issuance and Management $\Leftarrow$

In order to encourage adoption of Digital Signatures

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PrivaSeal™

Document Content Assurance

Signing and Verification System

that combines

Digital Certificate

with a

Personal Autograph

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PrivaSeal Features

- Uses Signing Object combining Digital Certificate with signers autograph

- Drag and Drop Document Signing; Click to Verify

- X.509 V3 compliant

- Suitable for personal or enterprise use

- Legal acceptance in most states

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PrivaSeal Features

- Compatible with Windows-Based OLE/RTF applications

- SmartCard, USB, PSN and Windows SN Token Support

- Supports Multiple Signatures on a single document

- True-type font scaling of signer's autograph

- Supports Issuance of signing object

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PrivaSeal™ Components

- **PrivaSeal Signature Editor**
  - Issuance of Signature Object
- **PrivaSeal Signer**
  - Applies signature to document
- **PrivaSeal Verifier**
  - Verifies document and signer

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PrivaSeal™ Issuance

- **Issuance of Signing Object**
  - Binds certificate, autograph, token, credentials and object properties through digital signature of the issuer

- **Corporate Issuance Model**
  - Signing object signed by corporate authority

- **Individual Issuance Model**
  - Self-signed signing object

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PrivaSeal™ Signature Editor

- Imports Issuer's X.509 Certificate

- Imports Signer's X.509 Certificate

- Imports/edits bitmap of signer's autograph

- Converts bitmap to true-type font

- Establishes token assignment and signing object credentials and properties

- Generates issuer-signed signing object

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PrivaSeal™ Signer

- **PrivaSeal Signer signs and applies signing credentials to Document - Drag and Drop or Plug-in**

- **Selective signing of RTF based upon signing object properties**

- **Multiple signatures are order dependent, previous signatures signed as part of the document**

- **Supports re-signing and viewing of certificate chain and signing object properties**

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PrivaSeal™ Signer - Tokens

- **Supports Variety of Smart Card Tokens**
  - **PC/SC and Proprietary Smart Card Readers**
  - **ISO 7816 compliant smart cards**
  - **Simple ID token with PIN**
  - **Microsoft CAPI/CSP compliant crypto cards**
  - **PKCS#11 Cryptoki**

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PrivaSeal™ Signer - Tokens

- **Other Hardware Tokens**
  - USB token
  - Pentium III Processor Serial Number
- **Soft Tokens**
  - Windows Serial Number

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PrivaSeal™ Verifier

- **Click on Signature object to verify signature**
  - Verifies signer's signature on the document
  - Verifies issuer's signature on the signing object
  - Verifies multiple signatures in signing order
- **Viewing of Credentials and Certificates**
  - Signer's Credentials
  - Signer's Certificate Chain
  - Issuer's Certificate Chain
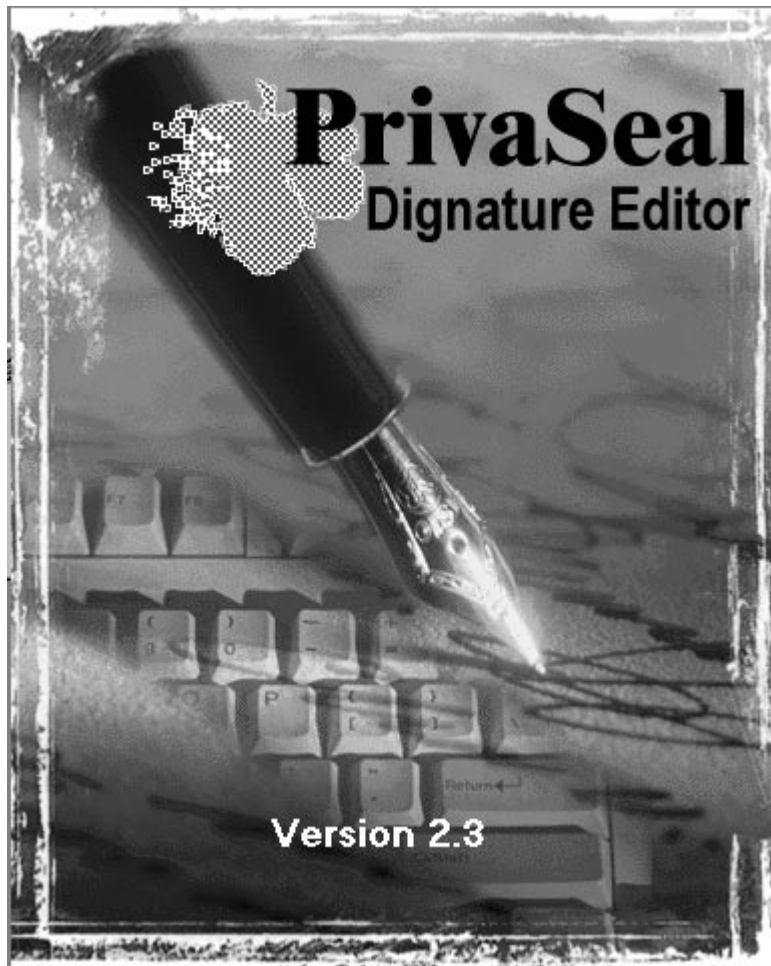
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PrivaSeal™ "Casual" PKI

- For internal use at reduced cost
    - X.509 for PrivaSeal Issuer only
    - PrivaSeal generated key pair for signers
- Encourages digital signature use where cost of full PKI implementation is not yet completely justified
- Provides scaleability to full PKI

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PrivaSeal Summary

- **Ease of Use**

  - Drag and Drop

  - Incorporates easily into existing work practices

- **Practical Orientation to PKI**

  - PKI Friendly - Encourages early adoption at low cost

  - Supports corporate issuance of credentials with external CA issued certificates.
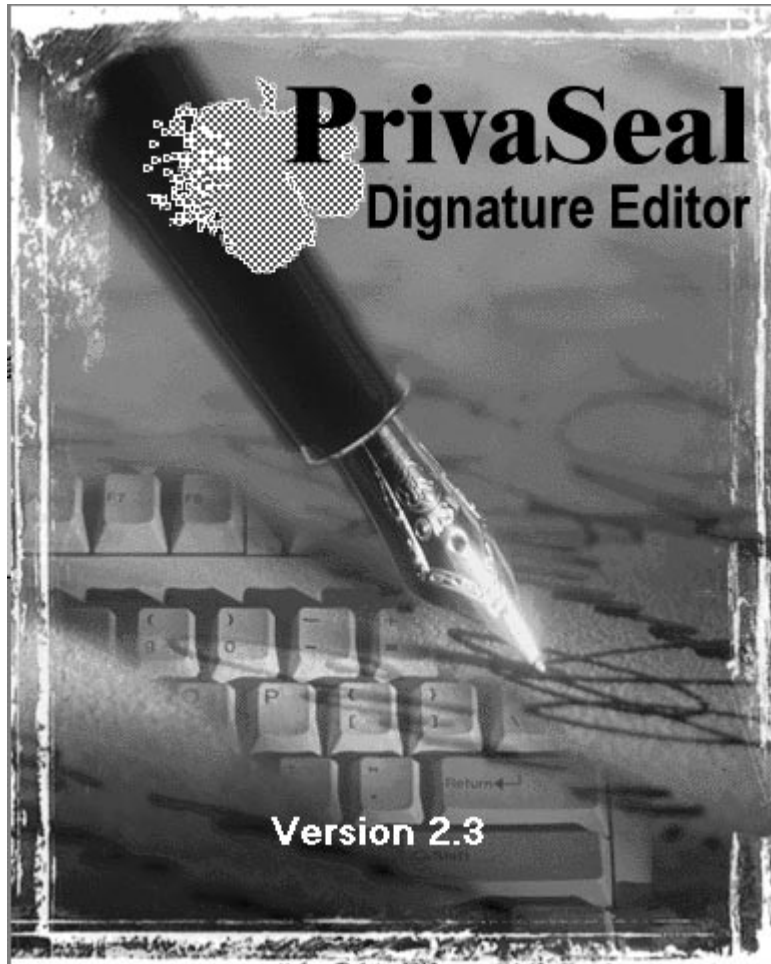
  - Supports full corporate PKI

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Demonstration

PrivaSeal Editor
PrivaSeal Signer
PrivaSeal Verifier

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Questions

PrivaSeal
Dignature Editor

Version 2.3

Aliroo, Inc.
McLean, VA
703-917-0778

jprohaska@aliroo.com
dauman@aliroo.com

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